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ABSTRACT

This document presents nine bibliographies, compiled from training materials used at workshops conducted by Project RETOOL, on the integration of special education technology into the higher education curriculum. Workshop topics include: "Effective Uses of Technology for Teaching Math, Science, Social Studies, and Writing"; "Technology Tools for Teacher Educators"; "Multimedia"; "Integrating Technology into the School Curriculum (Elementary, Intermediate, Secondary)"; "Technology as a Research Tool"; "Roundtable on Special Education Technology in the Higher Education Curriculum"; "Teaching in an Electronic Classroom"; "Developing and Repurposing Videodiscs"; and "Distance Education through Television." Each bibliography is preceded by an introductory section outlining the workshop title, date, location, presenters, and scope. The bibliographies, each consisting of from 20 to 50 references, list English-language monographs, reports, and journal articles. (JDD)

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SUMMATION BIBLIOGRAPHY

Project RETOOL: Integrating Special Education Technology into the Higher Education Curriculum

1990-1992

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1920 Association Drive
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INTRODUCTION

December, 1992

Since its establishment in 1974, Project RETOOL has been concerned with the continuing education of teacher educators and the development of quality personnel preparation programs. For the past 3 years, The Council for Exceptional Children (CEC), in collaboration with its Teacher Education Division (TED) has conducted Project RETOOL: Integrating Special Education Technology into the Higher Education Curriculum. Training materials and workshops provided higher education faculty an opportunity to integrate technology into their teacher preparation programs.

In the course of 3 years, the project conducted nine research-based training modules that could be incorporated into college courses in education. Three workshops addressed the integration of technology into the school curriculum for special education students; three focused on effective uses of technology for teaching specific content; two demonstrated to teacher educators how to model the use of new technologies in their teaching and research; and one provided information about quality training practices and programs in higher education.

For the convenience of those who are interested in special education technology, the following document was compiled from the training materials used at the nine workshops. A separate bibliography is provided for each workshop topic. For those of you who were able to attend some of the workshops, we hope the bibliography will be a useful reference; for those unable to participate in workshop activities, we hope the references provide helpful background information on the increasing use of technology in special education programs.

TABLE OF CONTENTS

Workshop #1:	Effective Uses of Technology for Teaching Math, Science, Social Studies, and Writing	1
Workshop #2:	Technology Tools for Teacher Educators	6
Workshop #3:	Multimedia	8
Workshop #4:	Integrating Technology Into the School Curriculum (Elementary, Intermediate, Secondary)	10
Workshop #5:	Technology as a Research Tool	14
Workshop #6:	Roundtable on Special Education Technology in the Higher Education Curriculum	18
Workshop #7:	Teaching in an Electronic Classroom	22
Workshop #8:	Developing and Repurposing Videodiscs	25
Workshop #9:	Distance Education Through Television	26

WORKSHOP TITLE:	Effective Uses of Technology for Teaching Math, Science, Social Studies, and Writing
DATE:	May 24-26, 1990
LOCATION:	George Mason University
PRESENTERS:	Ted S. Hasselbring, Vanderbilt University Charles MacArthur, University of Maryland John Woodward, University of Oregon
SCOPE:	Effective Uses of Technology for Teaching Math, Science, Social Studies, and Writing introduced teacher educators in special education to the concept of integrating technology into effective teaching practices for math, science, social studies, and writing. Ted Hasselbring demonstrated technological applications in math, including fluency software for computers and interactive videodisc programs. Charles (Skip) MacArthur emphasized the teaching of effective writing and showed how to integrate computers into instruction for teaching the writing process. John Woodward focused on the computer as a tool for integrating social studies/science "text structure" activities. He also offered guidance in selecting appropriate software and activities for professors whose teachers might have limited access to a computer.

BIBLIOGRAPHY:

Armbruster, B.B., Anderson, T.H., & Meyer, J.L. The framing project: A collaboration to improve content area reading using instructional graphics (Office of Educational Research and Improvement: Cooperative Agreement No. OEG 0087-C1001). University of Illinois at Urbana-Champaign: Reading Research and Education Center.

Atwell, N. (1987). In the middle: Writing, reading, and learning with adolescents. Portsmouth, NH: Heinemann.

Beck, I.L., & McKeown, M.G. (1988). Toward meaningful accounts in history texts for young learners. Educational Researcher, [August-September], 31-39.

Bransford, J.D., Goin, L.I., Hasselbring, T.S., Kinzer, C.K., Sherwood, R.D., & Williams, S.M. (in press). Learning with technology: Theoretical and empirical perspectives.

Bransford, J.D., Hasselbring, T.S., Barron, B., Kulewicz, S., Littlefield, J., & Goin, L.I. (1988a). Using macrocontexts to facilitate mathematical thinking. Hillsdale, NJ: Lawrence Erlbaum Associates.

Bransford, J.D., Sherwood, R.D., Hasselbring, T.S, Kinzer, C.K., & Williams, S.M. (in press). Anchored instruction: Why we need it and how technology can help. In D. Nix, & R. Spiro (Eds.), Advances in computers and instruction. Hillsdale, NJ: Lawrence Erlbaum Associates.

Bush, V. (1945). As we may think. Atlantic Monthly, 176(1), 101-108.

Calkins, L.M. (1986). The art of teaching writing. Portsmouth, NH: Heinemann.

Clark, P.R. (1987). Free to write: A journalist teaches young writers. Portsmouth, NH: Heinemann.

Clark, R. (1983). Reconsidering research on learning from media. Review of Educational Research, 53(4), 445-459.

Cohen, M., & Riel, M.M. (1989). The effect of distant audiences on students' writing. American Educational Research Journal, 26, 143-159.

Daiute, C.A. (1985). Physical and cognitive factors in revising: Insights from studies with computers. Research in the Teaching of English, 20, 141-159.

Englert, C.S., Raphael, T.E., Anderson, L.M., Anthony, H.M., Fear, D.L., & Gregg, S.L. (1988). A case of writing intervention: Strategies for writing informational text. Learning Disabilities Focus, 3, 98-113.

Englert, C.S., Raphael, T.E., Fear, K.L., & Anderson, L.M. (1988). Students' metacognitive knowledge about how to write informational texts. Learning Disability Quarterly, 11, 18-46.

Englert, C.S., & Thomas, C.C. (1987). Sensitivity to text structure in reading and writing: A comparison of learning disabled and nonhandicapped students. Learning Disability Quarterly, 10, 93-105.

Fitzgerald, J. (1987). Research on revision in writing. Review of Educational Research, 57, 481-506.

Fitzgerald, J., & Stamm, C. (1990). Effects of group conferences on first graders' revision in writing. Written Communication, 7, 96-135.

Flower, L., Hayes, J.R., Carey, L., Schriver, J., & Stratman, J. (1986). Detection, diagnosis, and the strategies of revision. College Composition and Communication, 37, 16-55.

Graham, S., & Harris, K. (in press). Cognitive strategy instruction in written language for learning disabled students. In S. Vogel & B. Levinson (Eds.), Educational Alternatives for Students with Learning Disabilities. New York: Springer-Verlag.

Graham, S., & Harris, K.R. (1988). Instructional recommendations for teaching writing to exceptional students. Exceptional Children, 54(6), 506-512.

Gere, A.R., & Stevens, R.S. (1985). The language of writing groups: How oral response shapes revision. In S.W. Freedman (Ed.), The Acquisition of Written Language, Norwood, NJ: Ablex.

Gersten, R., & Dimino, J. (1989). Teaching literature to at-risk students. Educational Leadership, 46 (25), 53-57.

Hasselbring, T., Sherwood R., Bransford, J., Fleenor, K., Griffith, D., & Goin, L. (1987-88). An evaluation of a level-one instructional videodisc program. J. Educational Technology Systems, 16(2), 151-169.

Hasselbring, T.S., & Cognition and Technology Group at Vanderbilt. (1989a). Anchored instruction and its relationship to situated cognition (Technical Report). Nashville, TN: Peabody College of Vanderbilt University, Learning Technology Center.

Hasselbring, T.S., Goin, L.I., & Bransford, J.D. (1988). Developing math automaticity in learning handicapped children: The role of computerized drill and practice. Focus on Exceptional Children, 20(6), 1-7.

Hasselbring, T.S., Sherwood, R.D., & Bransford, J.D. (1989a). An evaluation of instructional videodisc courseware on a rural K-12 school (Technical Report). Nashville, TN: Peabody College of Vanderbilt University, Learning Technology Center.

Kinzer, C.W., & Risko, V.J. (1988). Macrocontexts to facilitate learning. Paper presented at the 33rd Annual Conference of International Reading Association, Toronto, Ontario, Canada.

MacArthur, C.A. (1988). The impact of computers on the writing process. Exceptional Children, 54(6), 536-542.

MacArthur, C.A., Graham, S., & Schwartz, S. (1990). Helping each other write more effectively: A cooperative revision strategy. Manuscript submitted for publication.

MacArthur, C.A., & Shneiderman, B. (1986). Learning disabled students' difficulties in learning to use a word processor: Implications for instruction and software evaluation. Journal of Learning Disabilities, 19, 248-253.

MacArthur, C.A., & Stoddard, B. (1990, April). Teaching learning disabled students to revise: A peer editor strategy. Paper presented at the Annual Conference of the American Educational Research Association, Boston, MA.

Morocco, C.C., Dalton, B., & Tivnan, T. (1989). The impact of computer-supported writing instruction on the writing quality of learning-disabled students: Final report. Newton, MA: Education Development Center.

Morocco, C.C. & Neuman, S.B. (1986a). Word processors and the acquisition of writing strategies. Journal of Learning Disabilities, 19, 243-247.

Scardamalia, M. & Bereiter, C. (1986). Research on written composition. In M.C. Wittrock (Ed.), Handbook of Research on Teaching (pp. 778-803). New York: Macmillan.

Schwartz, S.S., & MacArthur, C.A. (1990a). Creating a community of writers: The computers and writing instruction project. Preventing School Failure, 34(4), 9-13.

Schwartz, S.S., & MacArthur, C.A. (1990b). They all have something to say: Helping learning disabled students to write. Academic Therapy, 25(4), 459-471.

Sherwood, R.D., Kinzer, C.K., Bransford, J.D., & Franks, J.J. (1987). Some benefits of creating macro-contexts for science instruction: Initial findings. Journal of Research in Science Teaching, 20(5), 417-435.

Sherwood, R.D., Kinzer, C.K., Hasselbring, T.S., & Bransford, J.D. (1987). Macro-contexts for learning: Initial findings and issues. Journal of Applied Cognitive Psychology, 1, 93-108.

Staton, J., & Tyler, D. (1987). Dialogue journal use with learning disabled students. The Pointer, 32(1) 4-8.

Thomas, C.C., Englert, C.S., & Gregg, S. (1987). An analysis of errors and strategies in the expository writing of learning disabled students. Remedial and Special Education, 8, 21-30.

Tyson, H., & Woodward, A. (1989). Why students aren't learning very much from textbooks. Educational Leadership, 47(3), 14-17.

Vacc, N.N. (1987). Word processor versus handwriting: A comparative study of writing samples produced by mildly mentally handicapped students. Exceptional Children, 54, 156-165.

Van Haneghan, J., Barron, L., Young, M., Williams, S., Vye, N., & Bransford, J. (1989). The Jasper series: An experiment with new ways to enhance mathematical thinking (Technical Report). Nashville, TN: Peabody College of Vanderbilt University, Learning Technology Center.

Vye, N., Bransford, J., Furman, L., Barron, B., Montavon, E., Young, M., Van Haneghan, J., & Barron, L. (1989). An analysis of students' mathematical problem solving in real-world settings. Paper presented to the 1989 Conference of the American Educational Research Association, San Francisco, CA.

WORKSHOP TITLE:	Technology Tools for Teacher Educators
DATE:	June 21-23, 1990
LOCATION:	University of Arkansas at Little Rock
PRESENTERS:	A. Edward Blackhurst, University of Kentucky
SCOPE:	Technology Tools for Teacher Educators featured Edward Blackhurst. He showed some methods that teacher educators can utilize to facilitate the many professional activities expected of today's higher education faculty. Participants explored the ways available software could help professionals with the following tasks: writing for publication, preparing presentations, writing proposals for grants and contracts, using technology as a teaching aid, managing the paperwork in higher education, and preparing NCATE review forms.

BIBLIOGRAPHY:

Berdine, W.H., & Blackhurst, A.E. (Eds.). (1985). An introduction to special education (2nd ed.). Boston, MA: Little, Brown and Co.

Blackhurst. A.E. (1965). Technology in special education - some implications. Exceptional Children, 31, 449-456.

Blackhurst, A.E. (1967). Tachistoscopic training as a supplement to reading instruction for educable mentally retarded children. Education and Training of the Mentally Retarded, 2, 121-125.

Blackhurst, A.E. (1977). Competency-based special education personnel preparation. In R.D. Kneedler & S.G. Tarver (Eds.), Changing perspectives in special education (pp. 156-182). Columbus, OH: Charles E. Merrill.

Blackhurst, A.E. (1978). Using telecommunication systems for delivering in-service training. Viewpoints in Teaching and Learning, 54, 27-40.

Blackhurst, A.E. (1982). A special education department asks: How can we revise our curriculum to meet new certification requirements? In R.O. Brinkerhoff, D.M. Brethower, T. Hluchyj, & J.R. Nowakowski (Eds.), Program evaluation: A practitioner's guide for trainers and educators (pp. 303-324). Boston, MA: Kluwer-Nijhoff.

Blackhurst, A.E. (1983). Using microcomputers to manage student records. Teacher Education and Special Education, 6, 163-172.

Blackhurst, A.E. (1988). Using microcomputers with mainstreamed students. In T.M. Stephens, A.E. Blackhurst, & L.A. Magliocca (Eds.), Teaching mainstreamed students (3rd ed.) (pp. 215-240). New York: Pergamon Press.

Blackhurst, A.E., & Hofmeister, A.M. (1980). Technology in special education. In L. Mann & D. Sabatino (Eds.), Fourth review of special education (pp. 199-228). New York: Grune & Stratton.

Blackhurst, A.E., & MacArthur, C.A. (1986). Microcomputer use in special education personnel preparation programs. Teacher Education and Special Education, 9(1), 27-36.

Blackhurst, A.E., MacArthur, C.A., & Byrom, E.M. (1987). Microcomputing competencies for special education professors. Teacher Education and Special Education, 10(4), 153-160.

Blackhurst, A.E., & Wright, W.S. (1978). Computer-facilitated planning for the development of special education instructional products. Journal of Special Education Technology, 1, 37-45.

Kinney, P.G., & Blackhurst, A.E. (1987). Technology competencies for teachers of young children with severe handicaps. Topics in Early Childhood Special Education, 7(3), 105-115.

Morsink, C.V., Blackhurst, A.E., & Williams, S. (1979). SOS: Providing in-service support to beginning LD teachers. Journal of Learning Disabilities, 12, 150-154.

Renne, D.J., & Blackhurst, A.E. (1977). The effect of adjunct auto-instruction in an introductory special education course. Exceptional Children, 43, 224-225.

WORKSHOP TITLE:	Multimedia
DATE:	August 16-18, 1990
LOCATION:	University of Wisconsin at Milwaukee
PRESENTERS:	Robert Gall, University of Lethbridge Ted Hasselbring, Vanderbilt University David Keefe, IBM Kuo-Ping Yang, IBM
SCOPE:	Multimedia allowed teacher educators to explore its use in college courses through HyperCard and Linkway software. Ted Hasselbring and David Keefe led workshop participants through the steps of the software that integrates text, sound, graphics, videodiscs, and CD-ROM into instructional materials.

BIBLIOGRAPHY:

Byrom, E. (1990). Hypermedia (multimedia). TEACHING Exceptional Children, 22(4), 47-48.

Carr, R.M. (1988, June). The hype of hypertext. PC World, pp. 277-285.

Cohen, K. (1990). So you want to make a videodisc! Educational Technology, [June], 35-38.

Dear, B.L. (1988, Mac Special Edition). Hypercard: What is it? BYTE, pp. 71-80.

Florin, F. (1988, May-June). Creating interactive video programs with hypercard. Hyperage, pp. 38-43.

Hofmeister, A.N., Engelmann, S., & Carnine, D. (in press). Technology and teacher enhancement: A videodisc alternative.

Ito, R. (1988, December). Video disc-o-tech. MacUser, pp. 209-220.

J.A.M., Inc. (1990, August). Features, advantages and benefits of interactive videodisc instruction. (Available from John A. Marszalek, 300 Main Street, East Rochester, NY 14445)

J.A.M., Inc. (1990, August). Features, advantages and benefits of IBM InfoWindow. (Available from John A. Marszalek, 300 Main Street, East Rochester, NY 14445)

Raskin, R. (1990, July). Multimedia: The next frontier for business? PC Magazine, pp. 151-192.

Smith, R.A. (1990). Videodisc--the next temptation. The Computing Teacher, [February], 12-13.

Thorkildsen, R., & Friedman, S. (1984). Videodiscs in the classroom. T.H.E. Journal, [April], 90-95.

Williams, G. (1987, December). Hypercard. BYTE, pp. 109-117.

Wood, R.K., & Stoddard, C. (1990). Repurposing video for local production: Implications of copyright laws. Educational Technology, [July], 44-45.

Yang, K. The IBM multimedia resource guide for educators.

WORKSHOP TITLE:	Integrating Technology Into the School Curriculum (Elementary, Intermediate, Secondary)
DATE:	February 14-16, 1991
LOCATION:	Florida Atlantic University
PRESENTERS:	Jeffrey Hummel, Johns Hopkins University Michael Livesay, Macro Systems International Judith Zorfass, Education Development Center
SCOPE:	Integrating Technology Into the School Curriculum at the Elementary, Intermediate, and Secondary levels featured Judith Zorfass, Jeffrey Hummel, and Michael Livesay in the presentation of three research-based models for integrating technology into the school curriculum. The models presented include (a) a curriculum model featuring inquiry-based learning; (b) a classroom-based model focusing on strategies and actions needed to support teachers; and (c) an organizational model addressing administrative and resource issues. Workshop leaders and participants discussed activities that support the models, provisions for teacher support in the use of the models, and strategies for providing training in the use of the models.

BIBLIOGRAPHY:

Anderson, M.A. (1990). Technology integration for mainstreamed students. The Computing Teacher, 18(4), 6-8.

Behrmann, M. (1984). Handbook of microcomputers in special education. Boston, MA: College Hill Press.

Behrmann, M. (1988). Integrating computers into the curriculum: A handbook for special educators. Boston, MA: College Hill Press.

Billings, K.J. (1985). An evaluation handbook for a computer education program. Eugene, OR: International Society for Technology in Education. (ERIC Document Reproduction Service No. ED 291 338)

Braun, L., Mousund, D., & Zinn, K. (1990). Vision: TEST (technology enriched schools tomorrow. Eugene, OR: International Society for Technology in Education.

Brunner, C. (1990). What it really means to "integrate" technology. Technology & Learning, 10, 12-14.

Chestnut, S. (1990). The use of planned organizational change to integrate microcomputers in to the elementary and secondary curriculum. SIGC Connections, 6(4), 4-6.

Collins, B. (1988). Computers, curriculum, and whole class instruction: Issues and ideas. Belmont, CA: Wadsworth Publishing Co.

Dockterman, D. (1989). Teaching in the one computer classroom. Cambridge, MA: Tom Snyder Productions, Inc.

Goldman, S., Semmel, D., Cosden, M., Gerber, M., & Semmel, M. (1987). Special education administrators' policies and practices of microcomputer acquisition, allocation, and access for mildly handicapped children: Interfaces with regular education. Exceptional Children, 53(4), 330-339.

Hanley, T.V., Appell, L.S., and Harris, C.D. (1988). Technological innovation in the context of special education systems: A qualitative and structured research approach. Journal of Special Education Technology, 9(2), 98-108.

Hanley, T.V., Yin, R.K., White, J.L., Clark, S.A., Brummel, D., Horst, P., & White, K.D. (1983). Microcomputers in the schools--Implementation in special education: Case study report. Under contract to Special Education Programs, USED No. 300-82-0250. (ERIC Document Reproduction Service, No. ED 238 222)

Havelock, R.G. (1973). The change agent's guide to innovation in education. Englewood Cliffs, New Jersey: Educational Technology Publications.

Holden, C. (1989). Computers make slow progress in class. Science, 244, 906-909.

The Holmes Group. (1990). Tomorrow's schools: Principles for the design of professional development schools. East Lansing, MI: The Holmes Group.

Jacobs. H. (1990). Interdisciplinary curriculum: Design and implementation. Alexandria, VA: ASCD.

Kinnaman, D. (1990). Staff development: How to build your winning team. Technology and Learning, 11(2), 24-30.

Livesay, J. M., & Murray, P.E. (1990). Promoting the integration of instructional technology into special education: An organizational process model. Technology and Disability.

Macrorie, K. (1988). The i-search paper. Portsmouth, NH: Educational Books, Inc.

Male, M. (1988). Special magic: Computers, classroom strategies, and exceptional students. Mountain View, CA: Mayfield Publishing Co.

McCarthy, R. (1988). Making the future work: The road to curriculum integration. Electronic Learning, 8(1), 42-46.

Morocco, C.C., & Zorfass, J.M. (1988). Technology and transformation: A naturalistic study of special students and computers in the middle school. Journal of Special Education Technology, 9(2), 88-97.

Nickerson, R., & Zodhiates, P. (Eds.). (1988). Technology in education: Looking toward 2020. Hillsdale, NJ: Lawrence Erlbaum Associates.

Northwest Regional Education Laboratory. (1988). Planning for computers in education: A resource handbook. Prepared for the American Federation of Information Processing Societies. Portland, OR: NWREL.

Olson, J. (1988). Schoolworlds-microworlds: Computers and the culture of the classroom. Oxford, England: Pergamon Press.

Persky, S.E. (1990). What contributes to teacher development in technology? Educational Technology, [April], 34-38.

Remz, A.R., Persky, S.E., & Zorfass, J. (1990, November-December). Computers and students with special needs: Not quite like pulling a rabbit out of a hat . . . The Early Adolescence Magazine, pp.26-29.

Roblyer, M.D. (1988). The effectiveness of microcomputers in education: A review of the research for 1980-87. T.H.E. Journal, 16(2), 85-89.

Sheingold, K., & Hadley, M. (1990). Accomplished teachers: Integrating computers into classroom practice. New York: Bank Street College of Education.

Snyder, T., & Palmer, J. (1986). In search of the most amazing think: Children, education, and computers. Boston, MA: Addison-Wesley.

Taylor, R. (Ed.). (1980). The computer in the school: Tutor, tool, tutee. New York: Teachers College Press.

Thinking about technology in the schools: A 1988 snapshot. (1989). Alexandria, VA: National School Boards Association.

U.S. Congress, Office of Technology Assessment. (1988). Power on! New tools for teaching and learning. Washington, DC: Government Printing Office.

Warger, C. (1990). Technology in today's schools. Alexandria, VA: ASCD.

Winkler, J.C., Stasz, C., & Shavelson, R. (1986). Administrative policies for increasing the use of microcomputers in instruction. (Report under contract to National Institute of Education, Grand No. NIE-G-83-0045). Santa Monica, CA: The Rand Corporation.

WORKSHOP TITLE:	Technology as a Research Tool
DATE:	March 28-30, 1991
LOCATION:	University of Georgia
PRESENTERS:	Dave Edyburn, Vanderbilt University Carolyn Adgar, University of Maryland David Malouf, University of Maryland George Haus, Vanderbilt University
SCOPE:	In Technology as a Research Tool, Dave Edyburn designed this workshop for higher education faculty who are interested in learning about various ways technology can facilitate their research. Presenters Dave Edyburn, Carolyn Adgar, David Malouf, and George Haus led discussions, demonstrations, and hands-on activities focusing on the four phases of the research process: designing the study, conducting the study, analyzing the data, and reporting the results. Resources, software programs, techniques, and strategies that enhance research productivity were emphasized. Participants were encouraged to bring software programs to share with the group.

BIBLIOGRAPHY:

Agar, M. (1980). The professional stranger: An informal introduction to ethnography. New York: Academic Press.

Bardon, J.I., and others. (1984). Research as practice: A conceptual model of training in special education. Teacher Education and Special Education, 9(2), 51-54.

Bogdan, R.C., & Biklen, S.K. (1982). Qualitative research for education: An introduction to theory and methods. Boston: Allyn & Bacon, Inc.

Brady, M.P., Williams, R.E., & Bailey, K. (1988). A quantitative analysis of doctoral dissertation research in special education. Teacher Education and Special Education, 11(1), 3-8.

Calder, J.E., and others. (1982). Research requirements in special education programs. Teacher Education and Special Education, 9(2), 51-54.

Calder, J.E., Justen, J.E., & Smith, D.L. (1990). Qualitative and quantitative research trends in special education journals. Teacher Education and Special Education, 13(3-4), 172-174.

Drew, C.J., and others. (1982). Research and researchers in special education. Exceptional Education Quarterly, 2(4), 47-56.

Elmore, P.B., & Woehlke, P.L. (1988). Statistical methods employed in American Education Research Journal, Educational Researcher, and Review of Educational Research from 1978 to 1987. Educational Researcher, 17(9), 19-20.

Epstein, M.H., & Cullinan, D. (1983). Guidelines for evaluating research in special education. Exceptional Education Quarterly, 4(3), 107-112.

Erickson, F. (1986). Qualitative methods in research on teaching. In M.C. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 119-161). New York: Macmillan.

Firestone, W.A. (1987). Meaning in method: The rhetoric of quantitative and qualitative research. Philadelphia, PA: Research for Better Schools, Inc. (ERIC Document Reproduction Service No. ED 292 816)

Fujiura, G., & Johnson, L, J. (1986). Methods of microcomputer research in early childhood special education. Journal of the Division for Early Childhood, 10(3), 264-269.

Hanely, T.V., and others. Technological innovation in the context of special education systems: A qualitative and structured research approach. Journal of Special Education Technology, 9(2), 98-108.

Hanson, M., Abramson, M., & McNamara, J.F. (1986). Practical significance in special education research. Journal of Special Education, 20(4), 401-408.

Howe, K.R. (1988). Against the quantitative-qualitative incompatibility thesis or dogmas die hard. Educational Researcher, 17(8), 10-16.

Hulek, A. (1983). Changing approaches to methodology of research in special education. International Journal of Rehabilitation Research, 6(1), 3-9.

Jacob, E. (1987). Qualitative research traditions: A review. Review of Educational Research, 57, 1-50.

Joiner, L.M. (1979). When a map is worth one-thousand anovas: Applications of statistical cartography in special education research and planning. Journal of Special Education, 13(4), 421-432.

Kauffman, J.M. (1987). Research in special education: A commentary. Remedial and Special Education, 8(6), 57-62.

Kavale, K.A. (1984). Potential advantages of the meta-analysis technique for research in special education. Journal of Special Education, 18(1), 61-72.

Kavale, K.A., & Glass, G.V. (1981). Meta-analysis and the integration of research in special education. Journal of Learning Disabilities, 14(9), 531-538.

Lakin, D.C. (1983). Research-based knowledge and professional practices in special education for emotionally disturbed students. Behavioral Disorders, 8(2), 128-137.

Lakin, D.C. (1983). Research-based knowledge and professional practices in special education for emotionally disturbed students. Behavioral Disorders, 8(2), 128-137.

Lewis, R.B., & Blackhurst, A.E. (1983). Special education practitioners as consumers and producers of research: A hierarchy of competencies. Exceptional Education Quarterly, 4(3), 8-17.

McLaughlin, M.J., and others. (1988). Special education teacher preparation: A synthesis of four research studies. Exceptional Children, 55(3), 215-221.

Miles, M., & Huberman, A.M. (1984). Qualitative data analysis: A sourcebook of new methods. Beverly Hills, CA: Sage.

Miller, P.M., & Drew, C.J. (1983a). Single-subject research: Basic designs for research in special education. Exceptional Education Quarterly, 4(3), 27-39.

Miller, P.M., & Drew, C.J. (1983b). Group research in special education. Exceptional Education Quarterly, 4(3), 61-76.

Murray, C., Anderson, J., Bersani, H., & Mesaros, R. (1986). Qualitative research methods in special education: Ethnography, microethnography, and ethology. Journal of Special Education Technology, 7(3), 15-31.

Prehm, H.J. (1976). Special education research: Retrospect and prospect. Exceptional Children, 43(1), 10-19.

Prehm, H.J. (1980). Research training and experiences in special education doctoral programs. Teacher Education and Special Education, 3(4), 3-9.

Renfrow, D., & Impara, J.C. (1989). Making academic presentations--effectively! Educational Researcher, 18(2) 20-21.

Repp, A.C., & Brusca, R.M. (1983). Single-subject research: Basic designs for research in special education. Exceptional Education Quarterly, 4(3), 27-39.

Rosenberg, M.S., & Jackson, L. (1988). Theoretical models and special education: The impact of varying world views on service delivery and research. Remedial and Special Education, 9(3), 26-34.

Salvia, J.A., & Meisel, C.J. (1980). Observer bias: A methodological consideration in special education research. Journal of Special Education, 14(2), 261-270.

Sindelar, P.T., & others. (1988). The power of hypothesis testing in special education efficacy research. Journal of Special Education, 22(3), 284-296.

Stainback, S., & Stainback, W. (1984). Broadening the research perspective in special education. Exceptional Children, 50(5), 400-408.

Stainback, S., & Stainback, W. (1988). Understanding and conducting qualitative research. Dubuque, IA: Kendall/Hunt.

Swanson, H.L., & Alford, L. (1987). An analysis of the current status of special education research and journal outlets. Remedial and Special Education, 8(6), 8-18.

Tesch, R. (1990). Qualitative research: Analysis types and software tools. New York: The Falmer Press.

Tizard, J. (1978). Research in special education. Special Education: Forward Trends, 5(3), 23-26.

Walberg, H.J. (1985). Research synthesis in special education introduction and overview. Journal of Special Education, 19(4), 381-385.

Wedell, K., & Roberts, J. (1982). Special education and research: A recent survey. Special Education: Forward Trends, 9(3), 19-25.

Wyatt, W.J., Hawkins, R.P., & McCoy, P.D. (1984). Classroom interventions from 1963 to 1982: A twenty year look at differences in published research by behavioral analysis, regular educators and special educators. Education and Treatment of Children, 7(3), 215-235.

WORKSHOP TITLE:	Roundtable on Special Education Technology in the Higher Education Curriculum
DATE:	May 30-June 1, 1991
LOCATION:	Teachers College, Columbia University
PRESENTERS:	A. Edward Blackhurst, University of Kentucky Joel Mittler, Long Island University Robert Gall, University of Lethbridge James Tawney, Pennsylvania State University
SCOPE:	A. Edward Blackhurst, Joel Mittler, Robert Gall, and James Tawney presented information that is essential for higher education faculty. This information included (a) a model for planning special education technology preservice programs; (b) issues related to faculty support and development; (c) delivery systems, including long-distance education; (d) policy issues; and (e) innovative strategies for changing and upgrading technology systems. The training notebook compiled specific information about special education technology program models, descriptions of programs across the nation, course designs, faculty development plans, resources for technology trainers, and professional standards.

BIBLIOGRAPHY:

Alessi, S.M., & Trollip, S.R. (1991). Computer -based instruction: Methods and development. Englewood Cliffs, NJ: Prentice-Hall.

Ambron, S., & Hooper, K. (Eds.). (1988). Interactive multimedia: Visions of multimedia for developers, educators, & information providers. Redmond, WA: Microsoft Corporation.

An electronic network makes this school a model of productivity. (1990). The Electronic School. September, A23-24.

Blackhurst, A.E. (1991a, May). Planning special education technology pre-service and in-service training. Paper presented at a workshop of The Council for Exceptional

Children's Project RETOOL, Roundtable on Special Education Technology in the Higher Education Curriculum, at Teachers College, Columbia University, New York.

Blackhurst, A.E. (1991b, May). Goals for technology use in special education. Paper presented at a workshop of The Council for Exceptional Children's Project RETOOL, Roundtable on Special Education Technology in the Higher Education Curriculum, at Teachers College, Columbia University, New York.

Blackhurst, A.E., & Shuping, M.B. (in press). A philosophy for the use of technology in special education. TEACHING Exceptional Children.

Brandt, R. H. (1990). Paradigms, multimedia, and tutoring, or is multimedia going to survive in the schools?, Multimedia Review, 1(3).

Byrom, E. (1991, May). Recommendations for establish or revising a special education technology training program. Paper presented at a workshop of The Council for Exceptional Children's Project RETOOL, Roundtable on Special Education Technology in the Higher Education Curriculum, at Teachers College, Columbia University, New York.

Center for Special Education Technology. (1989). Tech use guide: Using computer technology: Selecting software. (Office of Special Education Programs Contract No. 300-87-0115). Reston, VA: The Council for Exceptional Children. (ERIC Document Reproduction Service No. ED 324 843)

Center for Special Education Technology. (1991). Tech use guide: Using computer technology: Planning computer lessons. (Office of Special Education Programs Contract No. 300-87-0115). Reston, VA: The Council for Exceptional Children. (ERIC Document Reproduction Service No. ED 339 158)

Cole, M., & Griffin, P. (1987). Computers impact on the context of instruction. In Contextual factors in education (pp. 43-62). Madison, WI: Wisconsin Center for Education.

Curtis, J.F. (1987). An introduction to microcomputers in speech, language, and hearing. Boston, MA: Little, Brown & Company.

Education Development Center. (1991). Make it happen! A manual that guides middle schools to integrate technology into the curriculum. Newton, MA: Author.

Fitzgerald, G., Bauder, D., & Werner, J. Authoring CAI lessons: Teachers as developers. TEACHING Exceptional Children, 24(2), 15-21.

Green, P., & Brightman, A.J. (1990). Independence day designing computer solutions for individuals with disabilities. Allen, TX: DLM.

Hannaford, A.E. (1991, May). Infusing technology into special education pre-service training. Paper presented at a workshop of The Council for Exceptional Children's Project RETOOL, Roundtable on Special Education in the Higher Education Curriculum, at Teachers College, Columbia University, New York.

Kokaska, C., & Judd-Wall, J. (1990). Faculty development workshop: Assistive devices to access computers in special education (Final report). Long Beach: California State University, Workshop sponsored by the Office of the Chancellor: Computing and Communication Resources.

Livesay, M. (1991). Evaluation of the integration of technology for instructing handicapped children. (United States Department of Education Contract No. 300-86-0126). Silver Spring, MD: Macro Systems, Inc.

Mackall, P. (1987). (Ed.). Your computerized classroom. Washington, DC: Gallaudet University.

Malouf, D., Jamison, P.J., Kercher, M.H., & Carlucci, M.C. (1991a). Integrating computer software into effective instruction. TEACHING Exceptional Children, 23(2).

Moonen, J. (1989). Involvement and information: Fifteen challenges for computers in education. Educational Technology.

Novak, D.I., & Berger, C.F. (1991). Integrating technology into teacher education. T.H.E. Journal, [April], 82-86.

Ohler, J. (1987). Laptops, networks, and the evolution of education. Electronic Learning, [November], 9-10.

Reith, H. (1991a, May). Training models of infusion. Paper presented at a workshop of The Council for Exceptional Children's Project RETOOL, Roundtable on Special Education Technology in the Higher Education Curriculum, at Teachers College, Columbia University, New York.

Rubicam, I. (1987). Frequently cited authors in the literature on computer applications to education. Journal of Computer-Based Instruction, 14(4), 150-156.

Russell, S.J., Corwin, R., Mikros, J.R., & Kapisovsky, P.M. (1989). Beyond drill and practice: Expanding the computer mainstream. Reston, VA: The Council for Exceptional Children.

Russell, J.W. (1991). Scouting students' talents through video. Perspectives, 9(5), 16-17.

Staff. (1989, Number 13). Assistive technology. NICHCY News Digest. Washington, DC: National Information Center for Children and Youth with Handicaps.

Staff. (1991, June). Technology and Media Division Newsletter. Reston, VA: The Council for Exceptional Children.

Staff. (1990, Volume 2, Number 2). Capturing the Potential: Technology Applications for Special Educators in Higher Education.

Staff. (1990, Fall/Winter). Tech-NJ: Technology, Educators, & Children with Handicaps-New Jersey. Trenton, NJ: Trenton State College Department of Special Education.

Staff. (1991, September). Teacher Education Division Newsletter. Reston, VA: The Council for Exceptional Children.

Staff. (1991, June). SETRC News: The Newsletter of the Special Education Technology Resource Center. Athens, GA: The University of Georgia.

Taber, F. (1983). Microcomputers in special education. Reston, VA: The Council for Exceptional Children.

Wager, W., & Wager, S. (1985). Presenting questions, processing responses, and providing feedback in CAI. Journal of Instructional Development, 8,(4), 2-8.

White, M.A. (1990). Imagery in multimedia. Multimedia Review, 1(3).

Wiener, R.M. (1990). Computers for special education planning for the 1990's. Tech Trends, 35(4), 1-5.

WORKSHOP TITLE:	Teaching in an Electronic Classroom
DATE:	October 17-19, 1991
LOCATION:	University of North Texas
PRESENTERS:	Alonzo Hannaford, Western Michigan University George Haus, Western Michigan University
SCOPE:	Teaching in an Electronic Classroom informed teacher educators about various technologies that can enhance teaching and learning, and provided information to enable higher education faculty to make informed decisions about selecting and using electronic technologies that are most appropriate to their needs. Alonzo Hannaford and George Haus conducted demonstrations and led hands-on training that showed participants the instructional merits and limitations of various computer systems, including Macintosh and IBM. The training also included videodiscs, CD-ROM, projection systems, and emerging technologies. Factors related to deciding if, when, and how various programs may be used were also explored.

BIBLIOGRAPHY:

Bishop-Clark, D. & Grant, R. (1990). Implementing computer technology in educational settings. Journal of Educational Technology Systems, 19(4), 313-326.

Bruder, I. (1991). Schools of education: Four exemplary programs. Electronic Learning, 10(6), 21-24,45.

Cardinali, R. (1991). Optical storage: Future educational impact. Journal of Educational Technology Systems, 19(3), 181-190.

Chen, L.C. (1990). Interactive video technology in education: Past, present, and future. Journal of Technology Systems, 19,(1), 5-19.

Cyrs, T.E., & Smith, R.A. (1991). Designing interactive study guides. Tech Trends, 36(1), 37-39.

Dorn, D.S. (1989). Simulation games: One more tool on the pedagogical shelf. Teaching Sociology, 17(1), 1-18.

Edyburn, D.L. (1991, January). The electronic scholar. Paper presented at the Technology and Media Conference, Kansas City, MO.

Gullickson, A., & Farland, D. (1990). Using micros for test development. Tech Trends, 35(2), 22-26.

Haus, G.J., & Rieth, H.J. (1991). Author cross-reference index to journals in special education. Nashville, TN: Department of Special Education, Peabody College, Vanderbilt University.

Hofstetter, F.T. (1989). PODIUM: Presentation overlay display for interactive uses of media. Academic Computing, 4(3), 10-13, 48-50.

Holzberg, C.S. (1991, February). Buyer's guide: CD-ROM drives. Electronic Learning, pp. 20-24.

Holzberg, C.S. (1991, March). Buyer's guide: LCD panels. Electronic Learning, pp. 46-48.

Kettinger, W.J. (1991). Computer classrooms in higher education: An innovation in teaching. Educational Technology, 31(8), 36-43.

Knapper, C.K. (1988). Technology and college teaching. In R.E. Young & K.E. Eble (Eds.), College teaching and learning: Preparing for new commitments. New Directions for Teaching and Learning, No. 33. San Francisco: Jossey-Bass.

Lai, P. (1990). Interactive video courseware: Problems, issues, and practical implications. Journal of Education Technology Systems, 18(4), 313-323.

Rieth, H., Haus, G.J., & Bahr, C.M. (1989). The use of portable microcomputers to collect student and teacher behavior data. Journal of Special Education Technology, 9(4), 190-199.

Sherry, M. (1990). An EPIE institute report: Integrated instructional systems. Technological Horizons in Education Journal, 18(2), 86-89.

Smallen, D.L. (1989). Infusing computing into the curriculum: Challenges for the next decade. Academic Computing, 3(8), 8-12, 32-35.

Soloman, M.B. (1990). E-Mail: A printer for academics. T.H.E. Journal, 18(1), 64-65.

Thurber, B.D., Macy, G., & Pope, J. (1991). The book, the computer, and the humanities. Technological Horizons in Education Journal, 19(1), 57-61.

Updegrove, D.A. (1991). Electronic mail in education. Educational Technology, 31(4), 37-40.

von Pechmann, M., & Buskirk, G. (1989, October). Computer graphics software for persuasive presentations. Presentation Products Magazine, pp. 44-53.

Watkins, B.T. (1991). The electronic classroom. The Chronical of Higher Education, 38(3), A26-A29.

Wilson, D.L. (1991). Testing time for electronic journals. The Chronicle of Higher Education, 38(3), A22-A24.

WORKSHOP TITLE:	Developing and Repurposing Videodiscs
DATE:	February 27-29, 1992
LOCATION:	University of South Alabama
PRESENTERS:	Ted Hasselbring, Vanderbilt University Laura Goin, Vanderbilt University
SCOPE:	In Developing and Repurposing Videodiscs, Ted Hasselbring and Laura Goin demonstrated to teacher educators the development of a videodisc that can be used in teacher training. Workshop activities culminated in the creation of a videodisc showing how special education uses technology with students with varying disabilities. Workshop participants were asked to contribute short film clips that were compiled and edited onto a master videotape. Participants learned how to edit the master tape in preparation for having its contents transferred to a videodisc. Each participant received a copy of the videodisc and software application developed for the workshop.

BIBLIOGRAPHY:

Bransford, J., Sherwood, R., & Hasselbring, T. The video revolution and its effects on development: Some initial thoughts. (pp. 173-201).

The Cognition and Technology Group at Vanderbilt. (1990). Anchored instruction and its relationship to situated cognition. Educational Researcher, 19(6), 2-10.

Goldman, E. (1991, October). Integrated media technology in mathematics teacher education. Paper presented at the Conference on Critical Issues in Reforming Elementary Teacher Preparation in Mathematics and Science, University of Northern Colorado, Greeley.

Kaehler, C. In the cards. Hyperlink Magazine, pp. 27-29.

Williams, G. (1987, December). Hypercard. Byte, pp. 109-117.

WORKSHOP TITLE:	Distance Education Through Television
DATE:	December 4-5, 1992
LOCATION:	University of Utah
PRESENTERS:	M. Winston Egan, University of Utah Marshall Welch, University of Utah Helen Lacy, Station Manager, KULC Joan Sebastian, University of Utah
SCOPE:	Distance Education Through Television helped teacher educators develop practical skills necessary for successfully designing instruction and teaching via television. The presenters focused on the selection, adaptation, and organization of course content, instruction support systems (equipment, technicians, and administration), and activities that are directly related to reaching and teaching through television. Additionally, all workshop participants had opportunities for "on-screen" television production.

BIBLIOGRAPHY:

Ainsworth, D. (1988). Educational television revisited: The governor experience. Journal of Educational Television, 14(1), 73-78.

Bates, A.W. (1979). Appropriate Teaching Functions for Television, Radio and Audio-Cassettes in Open University Courses: A Summary of Functions Proposed in Successful Course Team Bids. IET Papers on Broadcasting No. 124. (Report No. MF01/PC01). United Kingdom, England: Open Univ., Walton, Bletchley, Bucks (England). Inst. of Educational Technology. (ED 227 805)

Bates, A.W. (1981). Some unique characteristics of television and some implications for teaching and learning. Journal of Educational Television and Other Media, 7(3),79-86.

Bates, A.W. (1983). The relationship between programme style and structure and learning from television. I.E.T. Papers on Broadcasting No. 227. (Report No. MF01/PC01).

United Kingdom, England: Open Univ., Walton, Bletchley, Bucks (England). Inst. of Educational Technology. (ED 298 952)

Bates, A.W. (1990). Interactivity as a criterion for media selection in distance education. Paper presented at the Annual Conference of the Asian Association of Open Universities, Jakarta, Indonesia.

Bogan, E.C. (1984). The use of interactive video in teaching microeconomics: A note. Journal of Economic Education, 15(4), 329-330.

Bolduc, W.J. (1989). The Mediated Delivery of Education: Can High-Tech Delivery Systems Effectively Serve Adult Learners? Papers presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication, Washington DC.

Brillantes, R.M., et al. (1990). A comparative analysis of mediated instruction: An exploratory study. Paper presented at the Annual Meeting of the Western Speech Communication Association, Sacramento, CA.

Brinkley, R., et al. (1991). Designing and producing courseware for distance learning instruction in higher education: A nine step, four element team approach. TeachTrends, 36(1),50-54.

Brown, L.A. Jr. (1982). The Impact of an Adult Distance Learning Program On-campus Enrollments. Paper presented at the Annual Meeting of the American Educational Research Association, New York.

Carl, D.R. (1986a). Teaching on DUET. Paper presented at the Conference of the Canadian Association for Distance Education, Toronto, Ontario, Canada.

Carl, D.R. (1986b). Developing faculty to use teleconferencing to deliver university credit courses over cable and satellite. Canadian Journal of Educational Communication, 15(4), 235-250.

Carver, J. & MacKay, R.C. (1986). Interactive television brings university classes to the home and workplace. Canadian Journal of Educational Communication, 15(1),19-28.

Cennamo, K.S., et al. (1990). Can Interactive Video Overcome the "Couch Potato" Syndrome? Proceedings of Selected Paper Presentations at the Convention of the Association for Educational Communications and Technology. IA: IR 014 544.

Cennamo, K.S., et al. (1991). Mental effort and video-based learning: The relationship of preconceptions and the effects of interactive and convert practice. Educational Technology, Research and Development, 39(1), 5-16.

Crane, V. (1985a). Annenberg/CPB Telecourses: Comparisons of Student Uses: Interview Comment Report; Survey of Dropout Students; Study Log Report; in the Fall of 1984. (Report No. MF01-PC10). Research Communications Inc., Chestnut Hill, MA. Corporation for Public Broadcasting; Washington, DC.

Crane, V. (1985b). Analysis of Student Uses of the Annenberg/CPB Telecourses Brain; Mind and Behavior; The Constitution: That Delicate Balance; The Write Course; The New Literacy; and Congress: We the People; in the Fall of 1984. (Report No. MF01/PC10). Research Communications, Inc., Chestnut Hill, MA. Corporation for Public Broadcasting; Washington, DC.

Creswell, K.W. (1986). Does instructional TV make the grade? Journal of Educational Television, 12(1), 19-27.

Dalton, D.W. (1987). Some advantages and disadvantages of narrow cast instructional television: One instructor's experiences. and The effects of individual and team learning on performance during computer-assisted instruction. Papers presented at the Annual convention of the Association for Educational Communications and Technology, Atlanta, GA.

Denton, J.J., et al. (1985). Assessing instructional strategies and resulting student attitudes regarding two-way television instruction. Journal of Educational Technology Systems, 13(4), 281-298.

Dirr, P.J. (1986). Research on Evaluation of Instruction by Telecommunications. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Ellis, L., & Mathis, D. (1985). College student learning from televised versus conventional classroom lectures: A controlled experiment. Higher Education, 14(2),165-173.

Family and Consumer Education. (1987) Evaluation of teaching/learning at a distance. Report of the Annual Conference on Teaching at a Distance, Madison, WI: University of Wisconsin at Madison.

Flagg, B.N. (1987). Formative evaluation in the development phases of a college telecourse. Paper presented at the Annual Meeting of the American Evaluation Association, Boston, MA.

Greenwood, A.N., & McDevitt, M.A. (1987). Multiple Teaching Strategies for Use with an Instructional Telecommunications Network. Paper presented at the Society for Applied Learning Technology, MA.

Grimes, P.W., & Niss, J.F. (1989). Concentrated study time and improved learning efficiency: An experiment using "Economics U$A." Journal of Economic Education, 20(2), 133-138.

Grimes, P.W., et al. (1989). The effectiveness of "Economics U$A" on learning and attitudes. Journal of Economic Education, 20(2),139-152.

Hackman, M.Z. & Walker, K.B. (1990). Instructional communication in the televised classroom: The effects of system design and teacher immediacy on student learning and satisfaction. Communication Education, 39(3),196-206.

Haughey, M. (1983). Teaching and learning via interactive satellite--A Janus view. (Report No. MF01/PC01). British Columbia, Canada: Interactive Systems, University of Victoria British Columbia. (ED 235 791)

Hortin, J.A. (1981). Successful examples of instructional technology in higher education. (Report No. MF01/PC01). KS: (ED 208 726)

Huffman, S.A., Jr., & Moore, J.F. (1983). Using media for learning: A multiple delivery distance education course. Media Management Journal, 2(3), 56-59.

Koontz, F.R.B. (1989). Critical barriers to the adoption of instructional television in higher education. Educational Technology, 29(4), 45-48.

Lin, C.A. & Creswell, K.W. (1989). Effects of televised lecture presentation styles on student learning. Journal of Educational Television, 15(1), 37-52.

Lozano, A.G. (1985). Educational Technology and Language Training. International Research and Studies Program. Final Report. (Report No. MF01/PC05). Boulder, Colorado: U.S. Department of Education, Washington, DC. University of Colorado. (ED 263 786)

Martinez, D., et al. (1982). Objective and subjective evaluations of a TV-program versus small group instruction for the lowa Drug Information Service. American Journal of Pharmaceutical Education, 46(1), 49-53.

McCleary, I.D., & Egan, M.W. (1989). Program design and evaluation: Two-way interactive television. American Journal of Distance Education, 3(1), 50-60.

McIsaac, M.S., et al. (1988). Video Education Centers To Meet Student Needs in Turkish Distance Education Programs. Paper presented at the Annual Meeting of the Association for Educational Communications and Technology, New Orleans: LA.

Morris, J.D. (1984). The Florida study: Improvement in student achievement and attitudes through variation in instructional television production values. Journal of Educational Technology Systems, 12(4), 357-368.

Morris, J.D., & Smith, A.B. (1988). Using focus groups to evaluate instructional media: A case study. Educational Technology, 28(5), 27-32.

Muta, H. (1985). The economics of the university of the air of Japan. Higher Education, 14(3), 269-296.

Nadel, J.L. (1988). A study of the relationship between learner preference and student achievement and attitudes in an instructional television course. Paper presented at the Annual Conference of the New England Educational Research Organization.

Nevins, C.L. & Wright, L.J. (1984). Teaching over television. A handbook for ITFS Teachers. (Report No. MF101). Chico, CA: California State University. (ED 266 768)

Pirrong, G.D., & Lathen, W.C. (1990). The use of interactive television in business education. Educational Technology, 30(5), 49-54.

Rhodes, E.L. & Cerveny, R.P. (1984). Interaction video as an economic teaching supplement. Journal of Economic Education, 15(4), 325-328.

Riffee, W.H., et al. (1990). Views of former students on interactive television and videotapes as forms of instruction. American Journal of Pharmaceutical Education, 54(2), 120-125.

Ritchie, H. & Newby, T.J. (1989). Classroom lecture/discussion vs. live televised instruction: A comparison of effects on student performance, attitude, and interaction. American Journal of Distance Education, 3(3), 36-45.

Shale, D.G. (1985). Innovation in higher education: The case of distance education. Paper presented at the Conference of the Canadian Society for Studies in Higher Education; Montreal, Quebec, Canada.

Shavelson, R.J., et al. (1986). Evaluating student outcomes from telecourse instruction. A feasibility study. Santa Monica, CA: Rand Corporation.

Simmons, I.V. (1991). Survey of student's attitudes toward the IHETS delivery system. (Report No. MF01/PC01). IN: Indiana Higher Education Telecommunications System. (ED 330 311)

Weber, A.M. (1984). The Pros & Cons of Teaching/Learning by Television. Paper presented at the Meeting of the Eastern Community College Social Sciences Association, Williamsburg, VA.

Whittington, N. (1986). Instructional television: A research review and status report. Austin, TX: College and University System, Coordinating Board.

Wong, A.T. (1990). Extending university courses to rural communities via satellite television. Journal of Educational Television, 16(1), 5-12.